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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------|-------------|----------------------|---------------------|------------------|
| 09/887,827 | 06/22/2001 | Joseph A. Abys | Abys 52-14-6-6 | 7859 |
| 47394 | 7590 | 02/01/2007 | EXAMINER | |
| HITT GAINES, PC | | | LEWIS, MONICA | |
| LUCENT TECHNOLOGIES INC. | | | ART UNIT | PAPER NUMBER |
| PO BOX 832570 | | | 2822 | |
| RICHARDSON, TX 75083 | | | | |
| MAIL DATE | | DELIVERY MODE | | |
| 02/01/2007 | | PAPER | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|---|-----------------|--------------|
| Advisory Action Before the Filing of an Appeal Brief | Application No. | Applicant(s) |
| | 09/887,827 | ABYS ET AL. |
| | Examiner | Art Unit |
| | Monica Lewis | 2822 |

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 09 January 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) The period for reply expires _____ months from the mailing date of the final rejection.
- b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because

- (a) They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) They raise the issue of new matter (see NOTE below);
- (c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

- 4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
- 5. Applicant's reply has overcome the following rejection(s): _____.
- 6. Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
- 7. For purposes of appeal, the proposed amendment(s): a) will not be entered, or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: _____.

Claim(s) rejected: _____.

Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

- 8. The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
- 9. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

- 10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

- 11. The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
 - See Continuation Sheet.
- 12. Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____.
- 13. Other: _____.



Continuation of 11. does NOT place the application in condition for allowance because: First, Applicant argues that Soeda fails to disclose that "the tensile stress state is internal to the tin or tin alloy film." However, Soeda discloses that "the increase in internal stress of the tin coating layer is small...it is inferred that the formation of whiskers is inhibited" (For Example: See Page 5). Therefore, the tensile stress is present in the tin or tin alloy. Second, Applicant argues that "Soeda fails to disclose whether its tin alloy layer is in either a compressive or a tensile state...it indicates that its sample was placed indoors, and that whiskers formed in the portion...on the compressive stress side...Soeda speaks readily about the increase and/or pronouncement of whisker growth...Soeda actually teaches and suggests a tin alloy in compressive internal stress, as opposed to the tensile internal stress."

In the final rejection (11/16/06) it was noted that the Applicant provided a document titled Suppression of Tin Whisker Growth through Optimized Tin Plating Chemistry Formulation Technistan. The document states that "compressive stress is the driving force for tin whisker growth and that a tin deposit which does not exhibit compressive stress will never form compressive stress...tensile stress counter-acts the compressive stress effects mentioned previously and produces a whisker-resistant tin coating." Soeda discloses that "the increase in internal stress of the tin coating layer is small...it is inferred that the formation of whiskers is inhibited" (For Example: See Page 5). Therefore, tensile stress is present in Soeda because whiskers are inhibited. Third, Applicant argues that Soeda fails to disclose that "the internal stress is attributable to the layer being deposited under tensile stress...Soeda makes clear that its internal stress is attributable to the oxidation of the tin with the elapse of time." However, Soeda does not disclose that the internal stress is attributable to oxidation. Soeda discloses that "a coating layer containing zinc at less than 10%, the amount of diffusion of zinc is small...the increase in the internal stress of the tin coating is small...it is inferred that the formation of whiskers is inhibited by this synergistic effect." Finally, Applicant argues that "it is not the use of tensile stress in Soeda that inhibits the whisker growth, but the reduction in stress and reduction in the formation of metallic compounds that inhibits whisker growth. However, as stated above Soeda discloses that "a coating layer containing zinc at less than 10%, the amount of diffusion of zinc is small...the increase in the internal stress of the tin coating is small...it is inferred that the formation of whiskers is inhibited by this synergistic effect."